

MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION

TRANSPORTATION MAINTENANCE WORKER

JOB DESCRIPTION

Employees in this job perform road and bridge work, winter, surface, structure, sign, signal, shoulder, and/or roadside maintenance activities. Maintenance activities also include equipment servicing and facility and grounds maintenance.

There are five classifications in this job.

Position Code Title - Transportation Maint Worker-R

Transportation Maintenance Worker (Recruit) 6

This is a recruit level Transportation Maintenance Worker (TMW) performing a range of maintenance activities and equipment operations. This includes classroom and on-the-road training required to operate a vehicle or vehicle/trailer combination weighing over 26,001 lbs. The work is performed in a training capacity until the employee successfully obtains a Group A Commercial Driver's License (CDL) with N or X endorsement and no air brake restrictions.

Position Code Title - Transportation Maint Worker-E

Transportation Maintenance Worker 6

This is the entry level. The employee, while participating in the Michigan Department of Transportation's (MDOT) TMW Work Element Program, performs a range of maintenance activities and equipment operations under close supervision in a learning capacity.

Transportation Maintenance Worker 7

This is the intermediate level. The employee, while participating in the MDOT's TMW Work Element Program, performs a range of maintenance activities and equipment operations under general supervision in a developing capacity.

Transportation Maintenance Worker E8

This is the experienced level. The employee, while participating in the MDOT's TMW Work Element Program, performs a full range of maintenance activities and equipment operations, and uses judgment in making decisions where alternatives are determined by established policies and procedures.

Position Code Title - Transportation Maint Worker-A

Transportation Maintenance Worker 9

This is the advanced level. The employee, while participating in the MDOT's TMW Work Element Program, performs either senior-level functions with complete responsibility and coordination for the most complex maintenance activities and/or equipment operations to include responsibility for performing inspection of bridges and culverts; or, as a lead worker overseeing the work activities of lower-level Transportation Maintenance Workers at a work site or facility.

NOTE: Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

JOB DUTIES

NOTE: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Performs road and bridge work on state trunklines to include, winter, surface, structure, sign, signal, shoulder, and/or roadside maintenance activities.

Performs maintenance activities including equipment servicing and facility and grounds maintenance.

Operates heavy-duty dump trucks with snowplows, underbody blades, sand and salt spreaders, and liquid applications to remove ice and snow accumulation from highways and bridges.

Operates equipment such as light-/heavy-duty trucks, tractors with attachments, backhoes, loaders, motor graders, rollers, air hammers, concrete saws and mixers, aerial towers, crack and pothole patching equipment, generators, and other light/heavy duty maintenance equipment to perform highway, bridge, and roadside maintenance.

Operates heavy-duty, highly specialized equipment such as underbridge inspection vehicles (reachall) and cranes.

Operates traffic control devices for establishing work zones on highways and bridges.

Operates air compressors, hydraulic post pullers, post-driving air hammers, gas cutting torches, air drills, and similar equipment, plus mechanics' hand tools to install, repair, and replace pipes, posts, signs, delineators, guardrail cable rail, and fences.

Operates equipment and tools to fabricate signs, treat roadside vegetation, and place pavement markings.

Repairs, maintains and installs overhead sign structures and sign structure foundations and operation of the equipment and tools used.

Installs temporary concrete barrier and attenuators as well as operation of the equipment and tools used.

Operates and maintains equipment and tools to prepare bridge decks and applies protective coatings such as epoxy products and waterproofing sealants or structural repairs.

Operates powered and hand tools to perform highway, bridge, and roadside maintenance.

Performs pre-inspection of equipment for determining functional operation of the equipment. Changes tires, oils and lubricates equipment and vehicles used in highway and bridge maintenance.

Purchases materials for maintenance activities. Trains other employees on operating equipment. Performs related work as assigned.

Additional Job Duties

Transportation Maintenance Worker 9 (Lead Worker)

Inspects and approves/disapproves work done by contractors/consultants.

Coordinates and oversees on-the-job work of lower-level Transportation Maintenance Workers and Laborers.

Explains general work assignments to crew while participating in the work and adapts as necessary pertinent general methods and procedures in order to meet required needs.

Trains new Transportation Maintenance Workers and Laborers on the job in all phases of highway maintenance operations.

Provides information for records and reports related to the work.

Transportation Maintenance Worker 9 (Senior Worker)

Inspects and approves/disapproves work done by contractors/consultants.

Routinely investigates, evaluates, and reports on the safety condition of structures with the region in accordance with applicable state and federal regulations.

Coordinates creation of new methods for maintenance activities. Coordinates the Transportation Asset Management System (TAMS).

Manages the requisitioning, procurement, and maintenance of an inventory, materials, supplies, and equipment required in the work. Maintains records, prepares reports, and composes correspondence relative to the work.

Creates material specifications for use in purchasing materials by the contract process.

Performs maintenance condition assessments and updates inventories of road features. Investigates complaints and conducts road inspections on road or bridge conditions and right-of-way encroachments.

Operates, maintains and trains others on the use of heavy-duty, highly specialized equipment such as underbridge inspection vehicles (reachall) and cranes.

Prepares contract specifications for use in contracting maintenance work.

Coordinates maintenance training including winter school, spring school, and truck driving school. Performs as Bureau, Region or Transportation Service Center (TSC) Coordinator for the TMW Work Element Program.

Coordinates TSC maintenance safety practices/program.

Performs other related work identified as complex by the MDOT.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of procedures and methods used in road and bridge work to include, winter, surface, structure, sign, signal, shoulder, and/or roadside maintenance activities as well as safety and maintaining traffic practices.

Knowledge of the operation of motorized equipment such as heavy-duty dump trucks with snowplows, underbody blades, sand and salt spreaders, and liquid applicators.

Knowledge of the operation of motorized equipment such as light-/heavy-duty trucks, tractors with attachments, backhoes, loaders, motor graders, rollers, air hammers, concrete saws and mixers, aerial towers, crack and pothole equipment, generators and other light-/heavy-duty maintenance equipment.

Knowledge of the operation of heavy-duty, highly specialized equipment such as underbridge inspection vehicles (reachall) and cranes.

Knowledge of the operation of air compressors, hydraulic post pullers, post-driving air hammers, gas cutting torches, air drills, and similar equipment.

Knowledge of the operation of equipment and tools used to fabricate signs, treat roadside vegetation, and place pavement markings.

Knowledge of the repair, maintenance and installation of overhead sign structures and sign structure foundations as well as the operation of equipment and tools used.

Knowledge of the installation of temporary concrete barriers and attenuators as well as operation of equipment and tool used.

Knowledge of the operation and maintenance of equipment and tools used to prepare bridge decks and apply protective coatings such as epoxy products and waterproofing sealants or structural repairs.

Knowledge of the operation of powered and hand tools to perform highway, bridge, and roadside maintenance.

Knowledge of the procedures for performing pre-inspection of equipment for determining functional operation of the equipment.

Knowledge of how to change oil, lubricants, and tires on equipment; and perform minor repairs to equipment and vehicles used in highway, bridge, and roadside maintenance.

Knowledge of material purchasing procedures. Knowledge of all bridge and culvert elements.

Knowledge of potential dangers and safety precautions applicable to the work crew.

Knowledge of street and highway traffic rules and regulations, and temporary signing and safety precautions to be observed while working on or near highways.

Ability to operate motorized equipment, power tools, and hand tools with skill and in a safe manner.

Ability to recognize various stages of structure deterioration and the relative causes and impacts of such deterioration.

Ability to make minor repairs to equipment, tools, and vehicles used in maintenance work. Ability to understand and follow instructions.

Ability to communicate effectively.

Additional Knowledge, Skills, and Abilities

Transportation Maintenance Worker 9 (Lead Worker), 9 (Senior Worker)

Knowledge of the Transportation Asset Management System (TAMS).

Ability to operate and maintain complex equipment under difficult conditions.

Knowledge of MiBridge and the Request for Action (RFA) and Work Recommendation process for bridges, large culverts and ancillary structures.

Transportation Maintenance Worker 9 (Lead Worker)

Ability to organize and coordinate the activities of Transportation Maintenance Workers in a specific work area.

Ability to allocate work to lower-level Transportation Maintenance Workers in a work area. Ability to determine priorities. Ability to conduct meetings.

Working Conditions

Work is performed by equipment operations and manual labor.

Some jobs require an employee to work in an environment that involves exposure to unpleasant and noxious fumes and odors.

Some jobs require an employee to be exposed to hazardous work environments.

Some jobs require extensive statewide travel and extended overnight stays.

Physical Requirements

The job duties may require an employee to sit for long periods, up to eight (8) hours.

The job duties may require an employee to sustain long periods in confined spaces.

The job duties may require an employee to work from heights.

The job duties may require an employee to wear adequate personal protective equipment.

The job duties may require an employee to complete the physical qualifications required by the Federal Commercial Driver's License.

The job duties may require an employee to sustain extensive and repetitive twisting, bending, climbing, lifting, and squatting.

The job duties may require an employee to lift up to 100 pounds.

The job duties may require an employee to be exposed to outdoor weather elements.

The job duties may require an employee to traverse rough terrain.

Education

Education typically acquired through completion of high school.

Experience

Transportation Maintenance Worker (Recruit) 6, Transportation Maintenance Worker 6

No specific type or amount of experience is required

Transportation Maintenance Worker 7

One year of experience equivalent to a Transportation Maintenance Worker 6 or Laborer E6 with experience in roadway, roadside, or bridge maintenance/construction, or sign maintenance, or pavement marking.

Transportation Maintenance Worker E8

Two years of experience equivalent to a Transportation Maintenance Worker, including one year equivalent to a Transportation Maintenance Worker 7; or, one year of skilled trades experience at the E9 level.

Transportation Maintenance Worker 9

Three years of experience equivalent to a Transportation Maintenance Worker, including one year equivalent to a Transportation Maintenance Worker E8.

Special Requirements, Licenses, and Certifications

Transportation Maintenance Worker 6 (Recruit)

Possession of a Commercial Learner's Permit at the time of hire. Continuing employment requires possession of a CDL Group A with N or X endorsement and no air break restrictions which must be obtained within twelve months from the date of hire.

Transportation Maintenance Worker 6, 7, E8, 9

All levels except the TMW-R (Recruit) must possess a CDL at the time of hire.

Transportation Maintenance Worker E8,9

The MDOT Statewide Work Element Coordinator must approve satisfactory completion of the MDOT TMW Work Element training and certification program.

Some positions within this class series are assigned job duties that may require possession of a commercial Pesticide Applicators license in compliance with the Pesticide Control Act of 1976.

Some positions within this class series are assigned duties that require possession of a Crane Operator License issued from an accredited crane operator testing organization in compliance with the Occupational Safety and Health Administration (OSHA).

Some positions within this class series are assigned duties that require Bridge Inspection Qualified Team Leader status in compliance with the Michigan Structure Inspection Manual (MiSIM) and National Bridge Inspection Standards (NBIS).

NOTE: Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

| <u>Job Code</u> | <u>Job Code Description</u> | |
|-------------------------------|------------------------------------|----------------------------|
| TRANMTWKR | TRANSPORTATION MAINTENANCE WORKER | |
| <u>Position Title</u> | <u>Position Code</u> | <u>Pay Schedule</u> |
| Transportation Maint Worker-E | TRMTWKRE | A31-005 |
| Transportation Maint Worker-A | TRMTWKRA | A31-011 |
| Transportation Maint Worker-R | TRMTREC | A31-024 |

CW

01/22/2023